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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|-----------------------------|--|----------------------|-------------------------|------------------|--|
| 10/765,202 | 01/28/2004 | James P. Dunyak | 58010-00602 | 58010-00602 7630 | |
| 25243 | 7590 08/10/2005 | EXAMINER | | INER | |
| COLLIER SHANNON SCOTT, PLLC | | | ODOM, CURTIS B | | |
| SUITE 400 | 3050 K STREET, NW SUITE 400 WASHINGTON, DC 20007 | | | PAPER NUMBER | |
| WASHINGTO | | | | <u> </u> | |
| | | | DATE MAILED: 08/10/2005 | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | | |
|--|------------------------|---------------|--|--|--|--|
| Office Autieus O | 10/765,202 | DUNYAK ET AL. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Curtis B. Odom | 2634 | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on <u>28 January 2004</u> . | | | | | | |
| 2a) ☐ This action is FINAL . 2b) ☑ This | | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the ments is | | | | | | |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| Disposition of Claims | | | | | | |
| 4) Claim(s) <u>1-88</u> is/are pending in the application. | | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6) Claim(s) is/are rejected. | | | | | | |
| 7) Claim(s) is/are objected to. | | | | | | |
| 8) Claim(s) <u>1-88</u> are subject to restriction and/or election requirement. | | | | | | |
| Application Papers | | | | | | |
| 9)☐ The specification is objected to by the Examiner. | | | | | | |
| 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | |
| a) ☐ All b) ☐ Some * c) ☐ None of: | | | | | | |
| 1. Certified copies of the priority documents have been received. | | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). | | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| | | | | | | |
| Attachment(s) | | 7/1 | | | | |
| 1) Notice of References Cited (PTO-892) | . 4) Interview Summary | (PTO-413) | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date | | | | | | |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 5) Notice of Informal Patent Application (PTO-152) 6) Other: | | | | | | |

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Election/Restrictions

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1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

Claims 1-56, drawn to canceling interference, classified in class 375, subclass
 346.

- II. Claims 57-76, drawn to a multi-user detection method/apparatus, classified in class 375, subclass 340.
- III. Claims 77-88, drawn to selecting a gain factor, classified in class 375, subclass345.
- 2. The inventions are distinct, each from the other because of the following reasons:

 Group I refers to a method/apparatus for canceling interference produced by a plurality of user as determined from a previous discrete value during a previous sub-symbol interval. Group II refers to a multi-user detection method/apparatus that estimates bits for a symbol corresponding to a given user by interpolating the signature waveforms for some of the plurality of users to a common sampling lattice of the received set of data. Group III refers to selecting a gain factor corresponding to a desired multi-used detection algorithm.
- 3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

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Conclusion

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4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Curtis B. Odom whose telephone number is 571-272-3046. The

examiner can normally be reached on Monday- Friday, 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 571-272-3056. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Curtis Odom July 27, 2005

STEPHEN CHIN

SUPERVISORY PATENT EXAMINE, TECHNOLOGY CENTER 2600